# **HIGHER NITEC IN AUTOMOTIVE ENGINEERING**

#### **Core Modules**

#### **Automotive Mechanics**

On completion of the module, students should be able to observe workplace health and safety, extract technical information, select and use lifting equipment and hand tools [to disassemble and reassemble automotive systems and components, perform basic maintenance of chassis and undercarriage as well as transmission system and components, and handle proper disposal of automotive wastes.

### **Control and Transmission Technology**

On completion of the module, students should be able to carry out servicing and perform inspection of the brake system, chassis and undercarriage, transmission system and supplemental restraint systems on a vehicle.

# **Engine Technology**

On completion of the module, students should be able to perform inspection of the air intake system, fuel system, engine management system, emission control system, and engine mechanical system on a vehicle.

#### **Automotive Electrics**

On completion of the module, students should be able to interpret diagnostics results and rectify faults in vehicle electrical systems, electronic circuits and air-conditioning system.

# **Engine and Electrical Systems Diagnostics**

On completion of the module, students should be able to conduct system fault finding with the use of diagnostic tools and equipment, and rectify faults in engine electrical, body electrical, air-conditioning, fuel, lubrication and cooling, engine mechanical, engine management and emission control systems, as well as service alternative powered vehicle's motor and battery.

#### **Control and Transmission Diagnostics**

On completion of the module, students should be able to interpret diagnostics results and rectify faults on vehicle wheel alignment, drive-line, suspension and steering, braking and transmission systems on petrol or diesel powered vehicles as well as service alternative powered vehicle's powertrain.

### **Industry Attachment**

On completion of the module, students should be able to apply the skills and knowledge acquired to take on a range of job scope at the company.